

REMARKS/ARGUMENTS

Claim 41 has been amended and claims 44, 57 and 58 have been canceled. Certain of the dependent claims have been amended to conform them to the amendment made to claim 41.

Amended claim 41 defines that the detonators are connected in a predetermined sequence in a consecutive train, that is, in an elongate serial sequence or array, and that a first detonator is distinguished from a second by placing at least one marker between the two detonators and interrogating the marker to ascertain at least one of the types of information set forth in parts a) through g) of the claim. This information greatly assists in controlling the blasting arrangement and in formulating a graphical representation of the blasting system, a feature which is defined in claim 43.

Claim Rejection Under 35 U.S.C. 102

Claims 41-58 stand rejected under 35 U.S.C. 102 over Marsh, EP 0601831 A1 ("Marsh").

This ground of rejection is respectfully traversed.

The similarity between the present invention and Marsh, the sole reference cited by the Examiner, is at best superficial. Marsh discloses an auxiliary control unit which receives a blast pattern table generated by a control computer. The auxiliary control unit has an identity number and counts the number of detonators during testing. Each auxiliary control unit performs a full self-test. There is no further description of the properties of the auxiliary control unit and therefore there is no suggestion that the auxiliary control unit of Marsh can or should be configured and used in a manner suggestive of a marker of the type and as used in the claims defining the present invention.

From Figure 1 of Marsh it is evident that the detonators are laid out in strings with each string starting and terminating at a zone amplifier 12 i.e. the auxiliary controller. It is thus seen that the primary function of Marsh's zone amplifier 12 is simply to monitor the performance of the detonators in the string to which the auxiliary control unit is connected. This arrangement is typical of a centralized blasting system in which principal signals come from a blast controller and are relayed to each of the

zone amplifiers which, in turn, control the blasting in the respective strings of detonators.

In contrast, the marker of the present invention is not simply a blast control device but, as claimed, is used primarily to distinguish one detonator or set of detonators in an elongate array from another detonator or another set of detonators. Thus, claim 41 has been amended to specify that one detonator is distinguished from another detonator by means of a marker between the detonators. The advantages which flow from this characteristic are fully described in the applicant's specification. For example, see paragraphs [0047] to [0050].

The only information obtainable from the auxiliary control unit 12 in Marsh, apart from its serial number, is the number of detonators connected to the control unit. This stands in contrast to markers which are capable of use in the claimed method of the present invention. Such markers are used for, and necessarily must have the capability for providing the substantially greater range and type of information as defined in amended claim 41. With Marsh before him or her, the skilled practitioner finds no suggestion whatsoever which would lead to the claimed method.

The marker of the present invention is used in distinguishing adjacent detonators from each other and only optionally to control the functions of the detonators. The optional latter control of functions is defined in certain of the dependent claims, for example, claims 46-48.

In view of foregoing, it is respectfully submitted that amended claim 41 is allowable over Marsh, the only prior art relied upon by the Examiner. All the remaining claims depend directly or indirectly from claim 41 and each of the pending claims is believed to now be in condition for allowance. Such action is respectfully requested.

Respectfully submitted,

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